



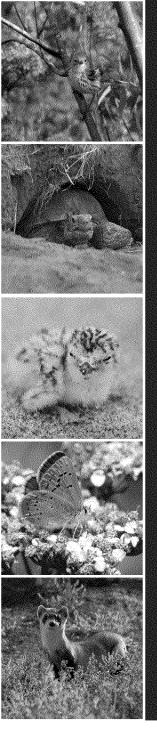
Pesticide Registration Review

- Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires registration of pesticide products
- FIFRA requires review of registered pesticides every
 15 years
- Section 7 of the ESA requires all federal agencies ensure – in consultation with FWS – actions they authorize are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat



History of FIFRA ESA Section 7 Consultations

- •1970s: case-by-case consultations began (Endrin, Creosote, Compound 1080, Strychnine)
- •1980s: crop-based "cluster consultations" (Corn, Sorghum, Cotton, Forestry uses, Mosquitos)
- •1990s: consultation on 31 pesticides (Greatest risk to aquatic/terrestrial species)
- 1996 2013: agencies unable to agree on risk assessment approach



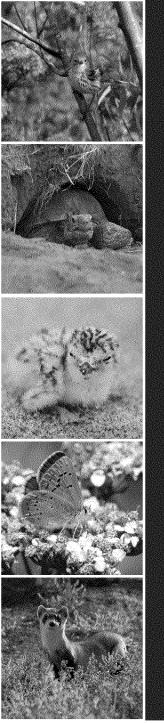
Pesticides Litigation - EPA

- 2002 CBD v. Johnson: CBD filed suit against EPA for failure to consult on the effects of 66 pesticides on the California redlegged frog
 - Settlement in 2006 EPA agreed to make effect determinations on 66 pesticides
 - Oct 2007 Oct 2008 EPA requested initiation of formal consultation on effects of > 30 pesticides on red-legged frog
 - Jan 2009 FWS informed EPA insufficient information to consult
- 2007 CBD v. EPA: CBD filed suit to compel EPA to initiate consultation on the effects of 75 pesticides on 11 listed species in San Francisco Bay area
 - Settlement in 2010 EPA complete effect determinations on the
 75 pesticides and initiate ESA consultation on those that may affect listed species
 - July 2013 EPA completed effects determinations for 69 of the 75
 - Settlement Amended 2015 Effect determinations on 4 pesticides (atrazine, simazine, propazine and glyphosate) for all listed species



Pesticides Litigation - FWS

- 2011 CBD v. FWS: CBD filed suit against FWS and EPA for failure to consult on the effects of 64 pesticides on red-legged frog
 - Settlement Nov 2013 FWS and EPA agreed to complete consultation on effects of 7 pesticides on red-legged frog within 3 years
 - Settlement Amended July 2014 Nationwide consultations on 5 pesticides (3 OPPs, 2 Carbamates)
- 2015 CBD v. FWS: CBD filed a lawsuit against FWS for failure to complete consultation on effects of 2 pesticides on delta smelt and 1 pesticide on Alameda whipsnake
 - Settlement Feb 2016 Nationwide consultations on 4 pesticides from EPA's 2015 settlement



Settlement Agreement Summary

- December 2017 chlorpyrifos, diazinon and malithion
- December 2018 carbaryl and methomyl
- December 2022 atrazine, simazine, propazine and glyphosate



National Academy of Sciences

Assessing the Risks to Endangered and Threatened Species from Pesticides

- EPA, FWS, NMFS, and USDA asked National Academy of Sciences to provide recommendations for a path forward
- NAS report recommendations:
 - Common approach
 - Best available data
 - Uncertainty
 - Exposure analysis
 - Effects analysis
 - Risk characterization



3-Step Process

- NAS suggested using a phased, iterative process that incorporates stakeholder engagement throughout
 - Phase 1: May affect/no affect
 - Phase 2: Likely to adversely affect/not likely to adversely affect (Biological Evaluations by EPA)
 - Phase 3: Jeopardy/no jeopardy (Biological Opinions by FWS and NMFS)
- All agencies agreed to pilot the 9 pesticides through December 2022
- All agencies recognize this process is currently not sustainable, working together to streamline



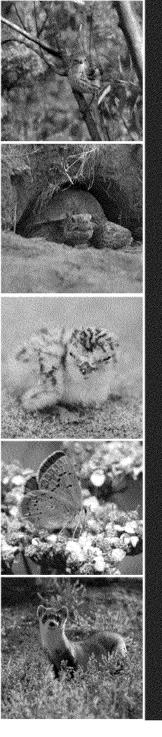
Biological Evaluations Steps 1 & 2

- EPA, in conjunction with FWS, NMFS, and USDA completes BEs:
 - Chlorpyrifos, diazinon, and malathion
 - Final BEs published January 2017
 - Carbaryl and methomyl
 - Final BEs due December 2017
 - Atrazine, simazine, propazine, and glyphosate
 - Final BEs due December 2020



Biological Opinions Step 3

- FWS and NMFS in consultation with EPA and USDA complete BOs:
 - Chlorpyrifos, diazinon, and malathion (OPPs)
 - Final BOs due December 2017
 - Carbaryl and methomyl
 - Final BOs due December 2018
 - Atrazine, simazine, propazine, and glyphosate
 - Final BOs due December 2022



OPP Consultations

- Chlorpyrifos, diazinon, and malathion
 - Widely used insecticides
 - Highly toxic nerve agents
- Preliminary Draft BO May 2017

b5-DPP

- RPAs buffers, equipment, no-spray zone/time.
- Brief Leadership before release to EPA
- Draft BOs to EPA June 2017
 - 60-day comment period



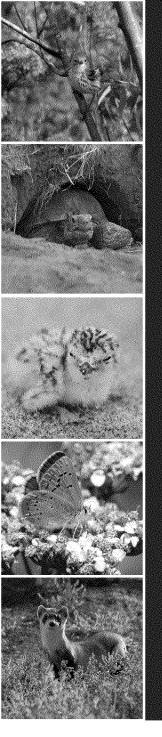
Interaction with Congress

- Provided numerous briefings for Senate Agriculture Committee and Staff
- Reports to Congress on Endangered Species Act Implementation in Pesticide Evaluation Program
 - Update on implementation of NAS recommendations and stakeholder engagement
 - Written by EPA, FWS, NMFS, and USDA
 - Interim Report provided November 2014
 - Final Report pending clearance



Industry Letters

- Dow AgroSciences, Makhteshim Agan of North America, and FMC Corporation
 - Asking EPA to withdraw BEs and FWS/NMFS to return BEs to EPA
- Crop Life America
 - Support for Dow et al. letter
- FWS Recommendations
 - Complete OPP BOs unless EPA withdraws BEs
 - Continue nationwide consultations on the 9 pilot pesticides covered by settlement agreements
 - Continue to streamline consultation process



Next Steps

- Clear Final Report to Congress
- Resolve response to Industry letters
- Brief on preliminary draft OPP BOs
- Transmit draft BOs to EPA for release
- Work with registrants and pesticide users on RPAs and RPMs
- Implement lessons learned for next BEs/BOs